

Mountain Plover (*Charadrius montanus*) Fact Sheet
Colorado NRCS
February 2001

General Information:

The mountain plover belongs to the order Charadriiformes, the shorebirds, and the family Charadriidae, along with the killdeer and several other plovers. Mountain plover is the endemic plover of the shortgrass prairie. About the size of a killdeer, the mountain plover averages 7-1/2 inches in length, with yellow to flesh-colored legs, and a short, fairly thick bill. During the breeding season, the mountain plover has a distinct black cap and a thin black line between the eye and the bill. Mountain plovers lack the black breast bands common to other plovers. The diet of this neotropical migrant is 95% insects.

A key feature that distinguishes the mountain plover from the killdeer is the lack of black bands on the chests of plovers.



Mountain plover photo courtesy of Stephen J. Dinsmore. Used by permission.

Status:

This bird has been designated as a Federal Proposed species by the U. S. Fish and Wildlife Service (FWS) under authority of the Endangered Species Act (ESA). The current population is probably less than 10,000 birds worldwide. Evidence that the mountain plover is continuing to decline is provided by long term research conducted at breeding sites in Montana and Colorado, Breeding Bird Survey data, Christmas Bird Count data from California, and National Wildlife Refuge records from California. While there is no reliable estimate of the rate of decline, the number of nesting mountain plovers on breeding transects in Montana and Colorado has declined during the past 10 years, and fewer mountain plovers are reported from key wintering areas in California. The mountain plover is threatened by spring tillage, sodbusting, certain types of range management activities, some oil and gas activities, and prairie dog control.

Distribution:

Breeding: Breeding occurs in Colorado, Montana, Wyoming, Oklahoma, Utah, New Mexico, Nebraska, and Texas (in order of breeding abundance). Current information also shows a very small number of breeding birds in Mexico. Most breeding plovers occur in Colorado, Montana, and Wyoming with many fewer in other states. One-half the entire population may breed in Colorado. Distribution in Colorado is primarily on the Eastern Plains and Park County, however a few breeding birds have been observed in Costilla, Conejos, Moffat, and Rio Blanco counties. Historically, the Pawnee National Grassland was considered the breeding stronghold in Colorado and perhaps for the entire population. New breeding sites found since 1995 suggest that the plover may be more widely distributed in Colorado than previously known with additional birds noted in South Park. Plovers occupy breeding range from about April 1 through August 1.

Winter: Current known wintering concentration is California, primarily in the Imperial Valley and Central Valley. Many fewer (less than hundreds rather than thousands as in California) mountain plovers have

been reported from Arizona, Texas, and Mexico. Plovers occupy winter sites in California from mid-October to mid-March.

Habitat:

Breeding: Nest sites typically occur in areas with vegetation less than 10 cm (4 inches) in height; having at least 30 percent bare ground; and less than 5 percent slope. Nest sites are usually heavily grazed by domestic livestock or prairie dogs. Vegetation in eastern Colorado usually consists of blue grama, buffalo grass, and prickly pear. Mountain plovers avoid wet sites. Taller vegetation or other structure (e.g. fence posts) may be used by chicks for shade.

General Habitat Modification Techniques:

Mountain plovers appear to have an affinity for sites that are disturbed by grazing, burning, or mechanical modification. Consequently, mountain plovers are found on sites that are heavily grazed (e.g. domestic livestock or prairie dogs), have been burned to control vegetative composition and structure, or that have been cultivated.

Some dryland croplands mimic natural habitat associations. Mountain plovers attempt to nest on some of these sites and then may be exposed to routine spring tillage practices. There is inferential evidence to suggest that nest destruction caused by spring tillage may contribute to their decline.

CRP offers an opportunity for landowners to attempt enhancement of mountain plover habitat by planting blue grama and/or buffalo grass, and implementing range management techniques to encourage appropriate micro-site conditions (e.g. burning). The FWS's Partners for Fish and Wildlife Program can subsidize habitat improvements that benefit the mountain plover. The Service's Safe Harbors and Habitat Conservation Planning (HCP) policy can provide assurances to landowners that future restrictions under the Endangered Species Act will not be sought on their lands if they choose to manage their lands for Threatened species. Contact your NRCS or FWS representative for details.

Beneficial Conservation Planning for Plovers:

In Colorado, the primary concern is to improve the quality of and to increase the amount of nesting habitat for plovers. This habitat may be found on rangeland, cropland, or CRP acres. Critical physical components of ideal plover habitat, regardless of whether the land use is rangeland, cropland, or CRP are:

- flat slopes-5 percent or less
- large acreages-80 to 250 acres thought to be ideal.

Additional characteristics of good plover habitat are keeping vegetation height at or below 4 inches during nesting season and maintaining at least 30 percent bare ground. Plovers are frequently found in prairie dog colonies, so most efforts that maintain prairie dogs will also benefit mountain plovers.

The information below describes targets for plover habitat improvement on rangeland, cropland, and CRP. When an NRCS planner locates an area that meets the physical components described above, the planner will include practices in an alternative that achieve one of the following:

RANGELAND (ecological sites suited to shortgrass prairie ecosystems)

Vegetation height 4 inches or less and less than 70 percent ground cover achieved by:

- 1) Grazing-by cattle, sheep, horses, or other domestic livestock or prairie dogs
- 2) Burning-early spring burns before birds return to nest are most favorable
- 3) Close mowing
- 4) Using chemicals on broadleaves

CROPLAND (Including pasture and hayland)

- 1) Converting cropland to CRP if it is located near a site that meets the above described rangeland characteristics (vegetation height 4 inches or less and less than 70 percent ground cover).
- 2) On cropland that will remain in cropland, the best action is to try to discourage use by plovers so that nests aren't destroyed. Most nest destruction on cropland results when plovers nest on bare or idle ground. This land is subsequently tilled for weed control or for planting during the nesting period, resulting in a failed nesting effort. Improving nesting success or discouraging nesting may be accomplished by:
 - A) Conducting tillage outside the nesting season
 - B) Using no-till
 - C) Leaving tall stubble (> 6 inches height) to discourage bird use for nesting
 - D) Leaving at least 70% residue/cover to discourage bird use for nesting

CRP (Conservation Reserve Program) Acres

Vegetation height 4 inches or less and less than 70 percent ground cover (minimum ground cover requirement for CRP is 1000 pounds small grain residue equivalent) achieved by:

- 1) Burning or mowing close in the early spring before the birds begin nesting
- 2) Planting short-grass seed on suited range sites (e.g.-blue grama and buffalograss)
- 3) Encouraging CRP in proximity to known nesting sites

Current knowledge of the plover's habits indicate they don't use irrigated pasture and hayland for nesting. Thus, irrigated pasture or hay fields are not a concern in plover management.

Endangered Species Act (ESA) Information

Section 7(a) of the Endangered Species Act, as amended, requires all Federal agencies to evaluate their actions with respect to any Federally listed or proposed species. Section 7(a)(1) provides that Federal agencies shall use their authorities in furtherance of the purpose of the Act by carrying out programs for the conservation of Federally listed species. Section 7(a)(2) of the Act requires these agencies to ensure that activities they may authorize, fund, or carry out are not likely to jeopardize the continued existence of any Federally listed species, or to destroy or adversely modify its critical habitat. Consequently, if an NRCS or FSA action may adversely affect the mountain plover, they must enter into formal consultation with the Fish and Wildlife Service. NRCS and FSA must consider mountain plover conservation needs during review of activities they may fund or carry out.

Section 9 of the ESA prohibits the take of federally listed species and applies to anyone, including individual farmers and ranchers. Consequently, any take of mountain plovers on private lands is a potential violation of the Act.

Section 10(a)(2)(A) of the Act allows for the taking of federally listed species on private lands if the taking occurs incidental to otherwise lawful activities. This taking is allowed only where no Federal agency action exists, and requires the applicant to adopt a habitat conservation plan (HCP) to minimize take while furthering the conservation of the species. The FWS will participate in the development of HCPs to ensure that mountain plovers can be conserved throughout their range while authorizing incidental take that may occur with the agricultural practices.

In addition, Section 10 allows permits to be requested under Safe Harbor Agreements which are signed agreements between FWS and a non-Federal landowner. The landowner voluntarily agrees to conduct conservation actions for the listed species on their property, and FWS agrees that future activities of the landowner will not be restricted beyond an agreed upon "baseline" even if the covered species become more numerous. The Safe Harbor approach is designed to encourage non-Federal landowners to

manage their lands for the benefit of listed species by ensuring that such activities will not further restrict the use of their property beyond the timeframe in the agreement.

References:

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